SHERWIN WILLIAMS

03/05 0003 / Cook
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Blue File

October 29, 1984

Mark Haney, Manager
Compliance Sub-Unit
Illinois Environmental Protection Agency
Division of Land Pollution Control
2200 Churchill Road
Springfield, IL 62706

Dear Mr. Haney:

Attached are completed forms tabulating analytical results from second quarter 1984 sampling of our groundwater monitoring wells MW-1A (G-101), MW-2A (G-102), MW-8 (G-108), and MW-9 (G-109). Groundwater contamination indicators were run in replicate for all four wells, and Students T test analyses run comparing data against background data established for the upgradient well, MW-1A, in 1983. Students T test calculations were made for MW-8 and MW-9 although background data for these wells has not yet been completed. This sampling period represents the third consecutive quarter for each of these wells.

Interim drinking water standards criteria were exceeded for arsenic in MW-9, 0.37 mg/l vs the standard of 0.05 mg/l; gross Beta in MW-9, 25 pCi/l vs the standard of 15 pCi/l; gross alpha in MW-8, 9 pCi/l vs the standard of 5 pCi/l; and gross Beta in MW-8, 16 pCi/l vs standard of 15 pCi/l.

Groundwater surface elevations, referred to MSL on the basis of CCD @ 579.48 were as follows:

MW-1A, upgradient	588.24
MW-2A	588.64
MW-8	587.36
MW-9	588.12

Results obtained have been tabulated on forms provided by the Agency. In addition, results as reported by the analyzing laboratory are included. A tabulation has been prepared of background analysis results from G-101 (MW-1A), with calculated means and variances listed. A tabulation of results obtained for each downgradient well is also attached, along with calculated means and variances.

Statistical comparisons for all wells compared to background data from G-101, upgradient, have been calculated using the Students T test, with calculation sheets attached. These comparisons indicate statistically significant difference in TOC for wells G-102, G-108 and G-109, in specific conductance for G-102

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and G-108, and for pH and TOX for G-109. It would be noted that background data for monitoring wells G-108 and G-109 is not complete, will be finished when results from third quarter 1984 sampling done in September are received.

The results obtained for pH measurement at G-109 do not appear to have any relationship to operation of these equalization ponds, since pH is maintained at 5.5-6.5 in order to comply with Chicago Metropolitan Sanitary District regulation at least cost. Plant effluent is in fact, strongly acidic, and is neutralized prior to transfer to the equalization ponds. It has been suggested that the bentonite used for sealing the well may be the cause.

Results obtained for TOX concentration at G-109 appear to be laboratory or sampling error, since previous measurements at this well (and in fact for all wells) have been significantly lower, and no chlorinated organic materials are in significant use at the facility. Results from September 1984 sampling is expected to confirm this, and it is requested no further action be required pending these results.

Since analyses for TOC and specific conductance in all wells are essentially the same as for all previously reported values, it appears that assessment analysis for these parameters is required. Since the facility is a manufacturing facility, records are maintained of raw material usage as well as products and intermediates manufactured during the period these equalization ponds have been in service. It is therefore proposed that sampling and analysis be confined to those components potentially present in groundwater, as outlined in the groundwater assessment program submitted to the Maywood office of IEPA on April 6, 1984. A listing of these components will be prepared and compared with the list established at 40 CFR 261, Appendix VIII. If further analysis is required by the agency, it is requested that a preliminary screening be performed as outlined in methods 6010 (ICAP) 8240 and 8250 as outlined in EPA publication SW846.

If further action is required, please contact me.

Yours truly,
SHERWIN WILLIAMS CHEMICALS

C. D. Baker

cc: Craig Liska
Illinois EPA
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